Inverter, 20-inch
Replacement Instructions

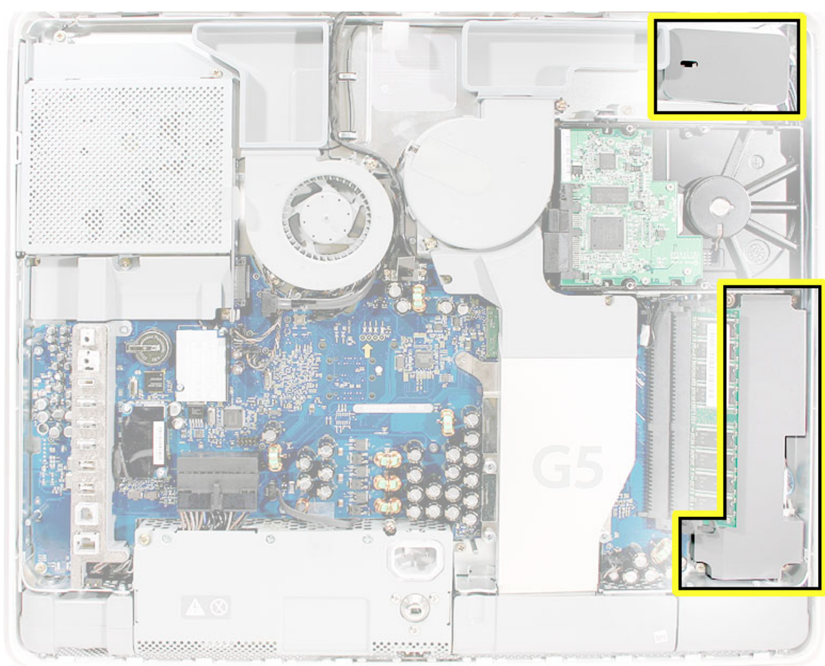
Follow the instructions in this document carefully. Failure to follow these instructions could damage your equipment and void its warranty.

Tools Required

- Use the screwdriver provided, or a Phillips #2 screwdriver, preferably with a magnetized tip
- Needlenose pliers
- Screw tray or equivalent to hold the screws
- Flat-blade screwdriver

Part Location

Important: Removing the inverter must be done carefully to avoid fracturing the DIMM connectors.



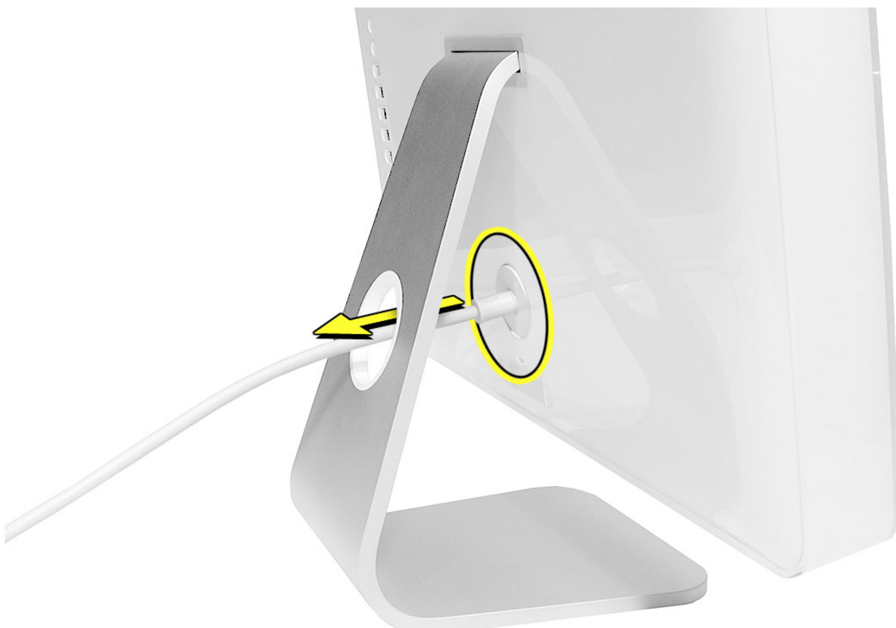
Important Things to Know

1. **All customer removable screws are brass colored. Do not remove screws unless they are brass colored, or you will void your warranty**.
2. A magnetized “L”-shaped Phillips screwdriver is included with the replacement part.
3. Remove the gray plastic inverter cover before returning the inverter to Apple. The procedure will show you how.
4. Ground yourself when working on the computer. The procedure will show you how to ground yourself.
5. Do not pull on individual wires when disconnecting a part; pull on the connector.
6. Keep drinks and other liquids away from the area you are working on the iMac.

Opening the Computer

Note: These instructions cover the iMac G5 (20-inch) models. The models may look slightly different from one shown in the illustration; however, the following procedure applies to both models.

1. Turn off your computer by choosing Shut Down from the Apple () menu.
2. Disconnect all cables, and unplug the power cord from your computer.



3. Place a soft, clean towel or cloth on the desk or surface. Hold the sides of the computer and slowly lay the computer face down as shown.

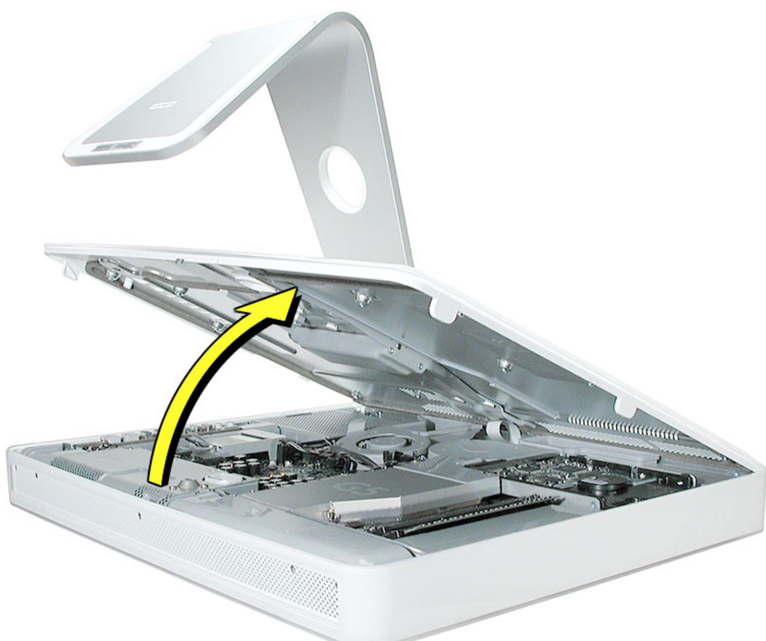


4. Locate the three silver case screws circled below. You may have to lift the stand to locate the middle case screw. **Note:** These screws are captive; they are part of the display/bezel assembly and cannot be removed.

   Using the tool provided, or a Phillips #2 screwdriver, loosen the three captive screws. Turn the screws to the left until they stop turning. **Don't force the screws once they stop turning**.



5. Holding the back cover by the metal foot, tilt the cover up and lift it off the computer. Set the back cover aside.



Removing the Inverter

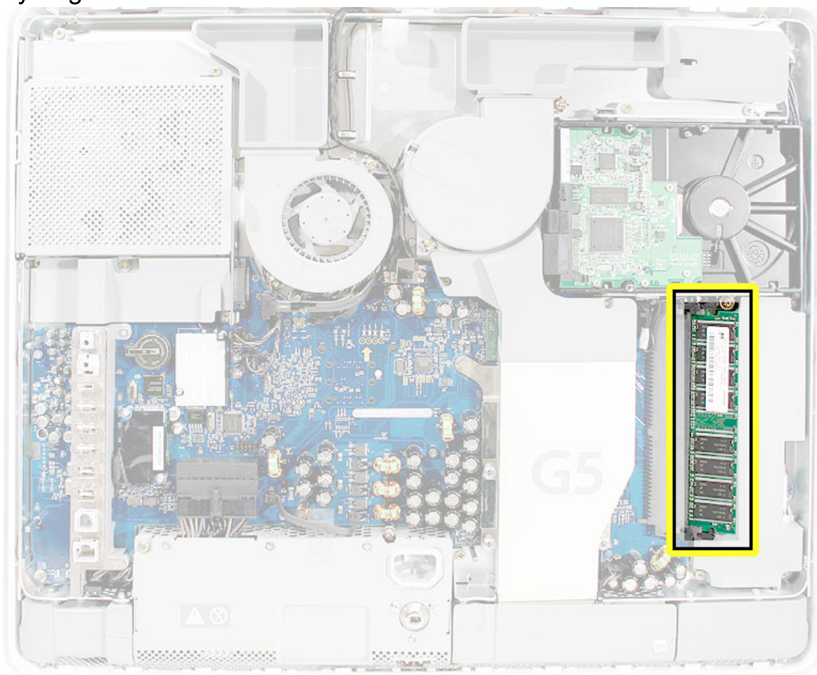
1. To access the inverter other service modules have to be removed. This procedure will show you how to remove and replace each module. As you remove each module, set it aside, along with the screws for that module.

2. Ground yourself. Touch the metal surface (as shown below) on the inside of the computer to discharge any static electricity.

   Warning: Always discharge static electricity before you touch any parts or install any components inside the computer. To avoid generating static electricity, do not walk around the room until you have finished installing the part and closed the computer.

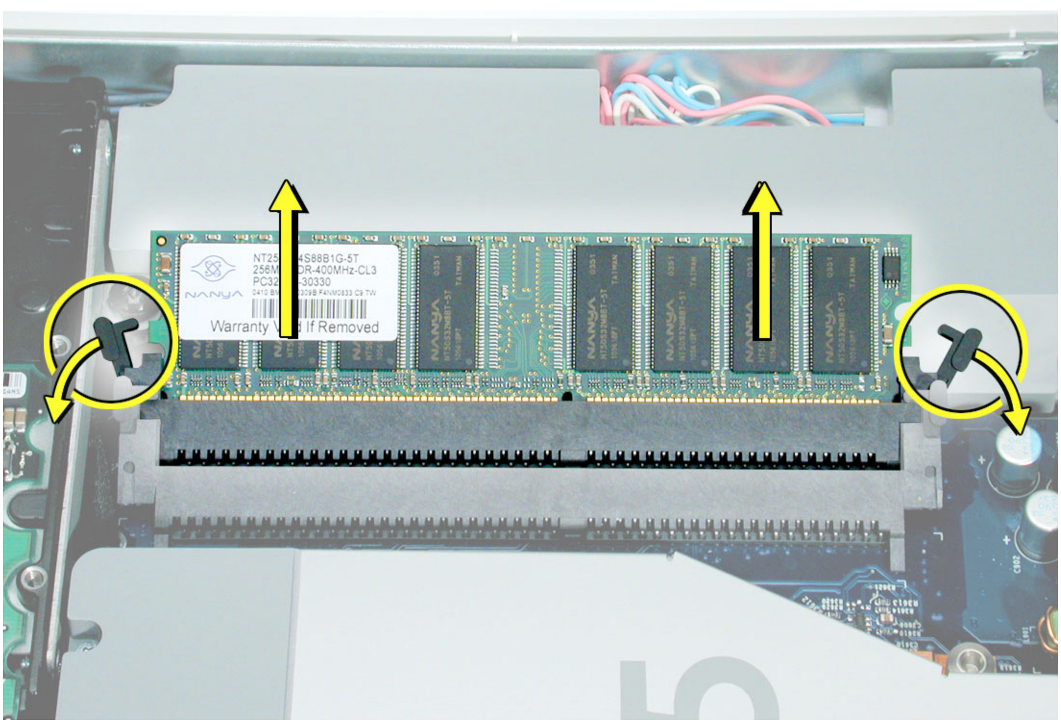


3. Locate the memory module(s) in the bottom right corner. You must remove the memory to gain access to the inverter.

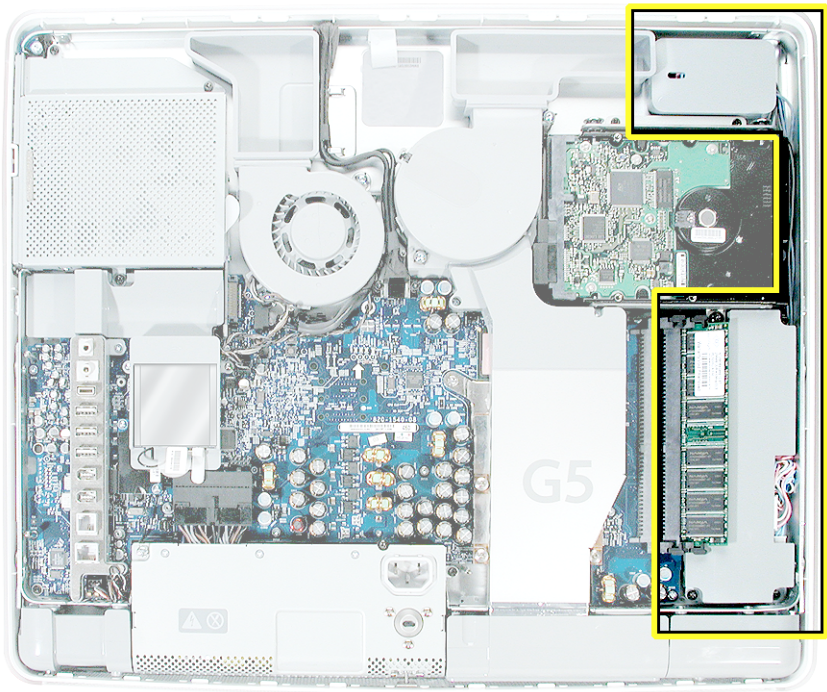


4. Rotate the computer to the left so the memory is in the position shown below.

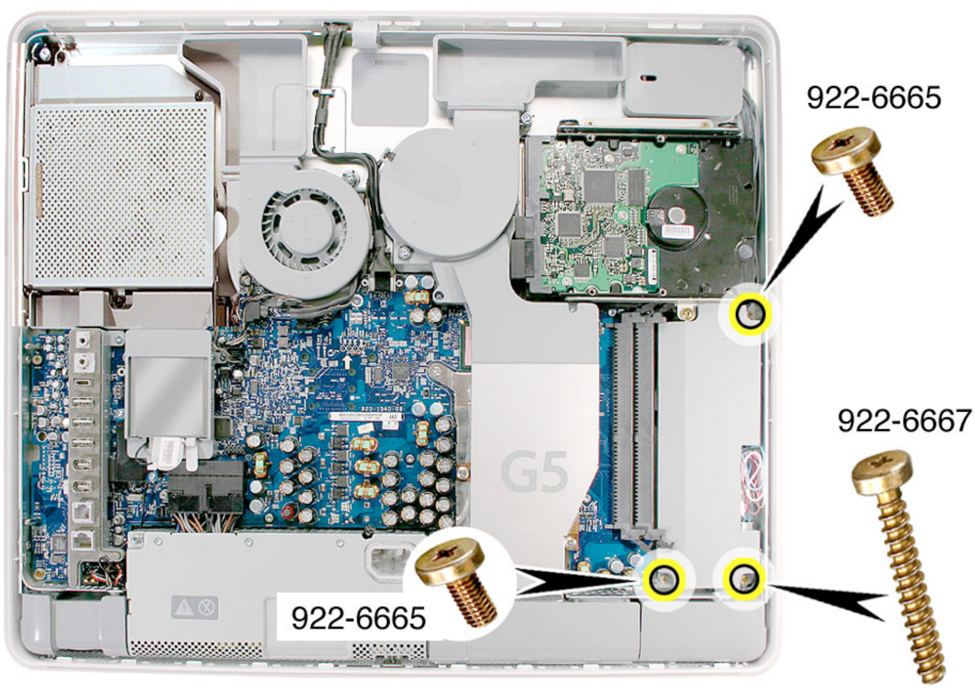
5. To release the memory from its slot, push down on the two side latches (circled below). Pull the memory module out of the slot. Repeat this step if you have a second memory module.



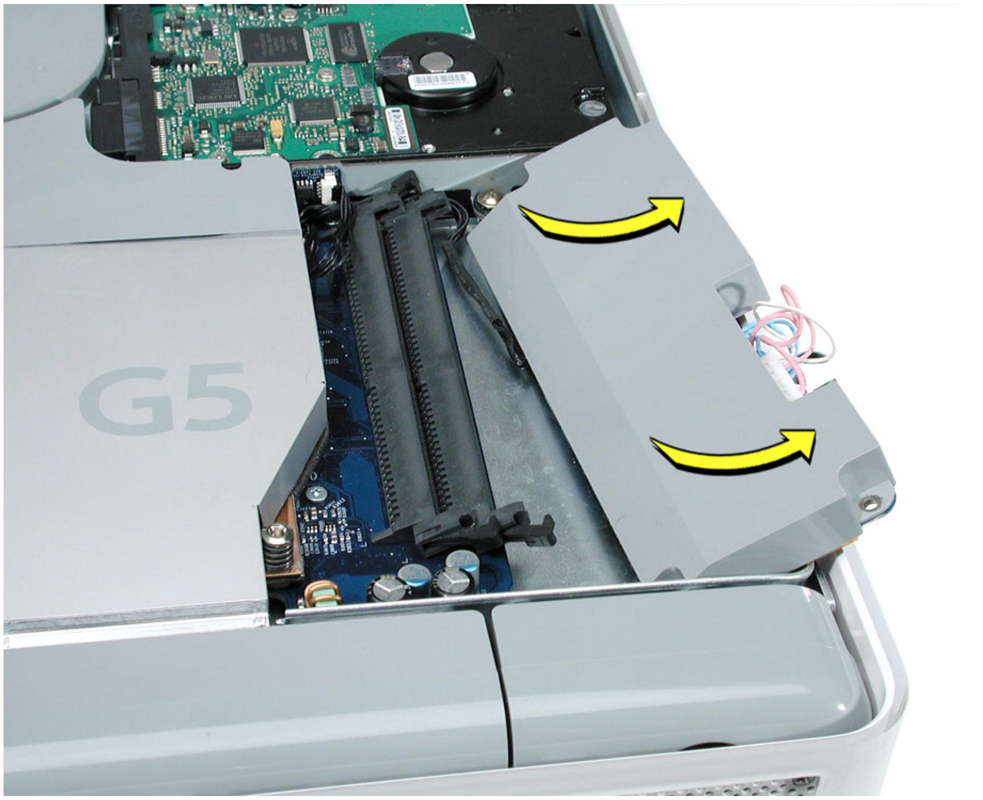
6. Locate the gray plastic module on the right side of the computer. This is the inverter.



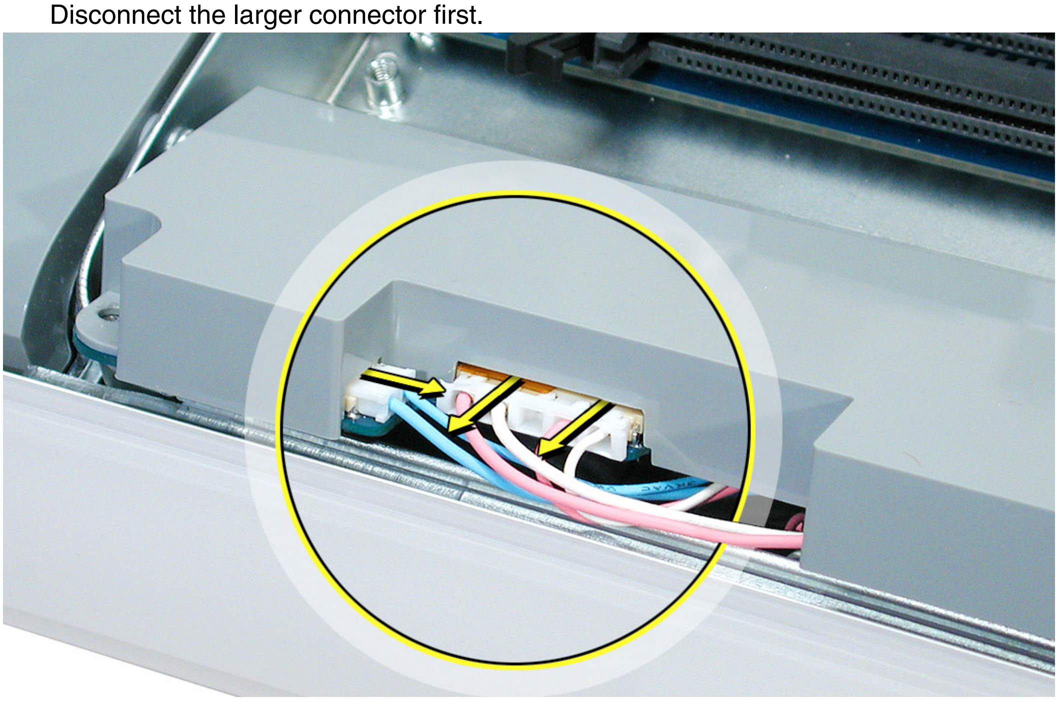
7. Remove the three inverter screws (circled below).



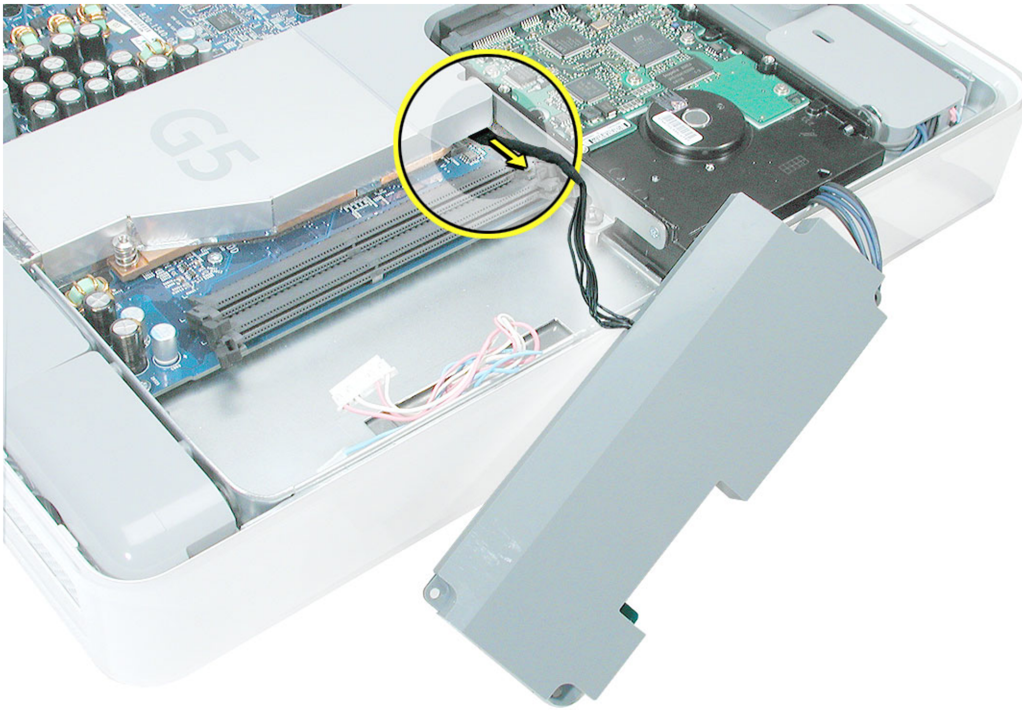
8. Slide the inverter out at an angle. Locate the colored cables connected on the right side of the inverter. **Important:** Carefully slide out the inverter so that it doesn't make contact with the DIMM connector latches.



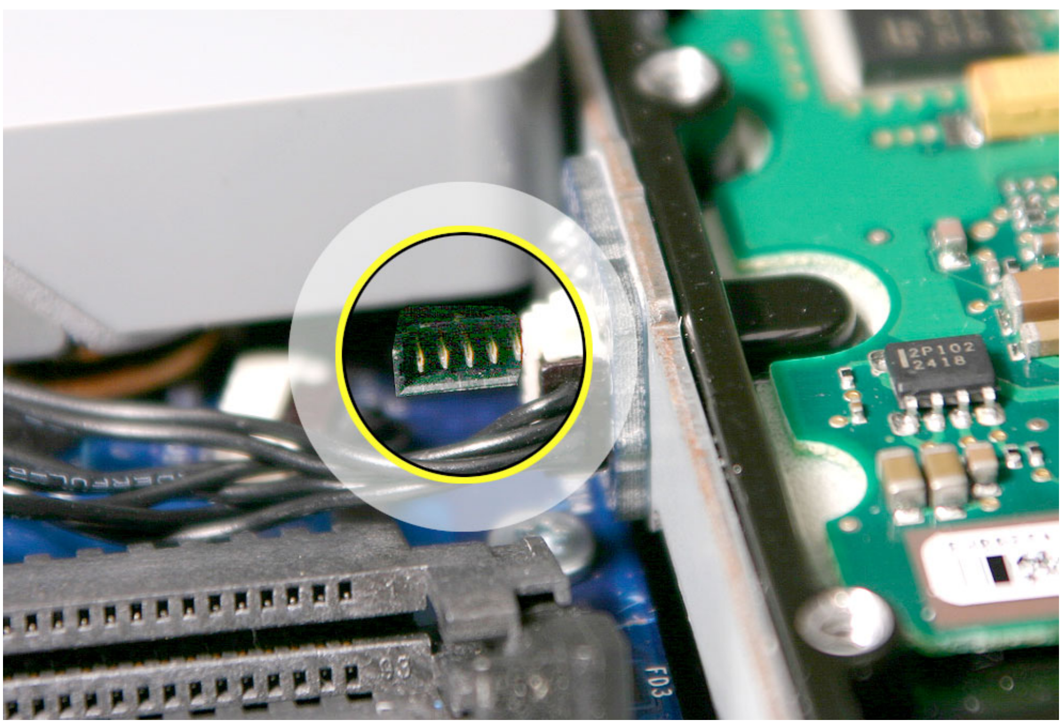
9. Disconnect the two inverter cables by pulling on the connectors, not on the cables. Disconnect the larger connector first.



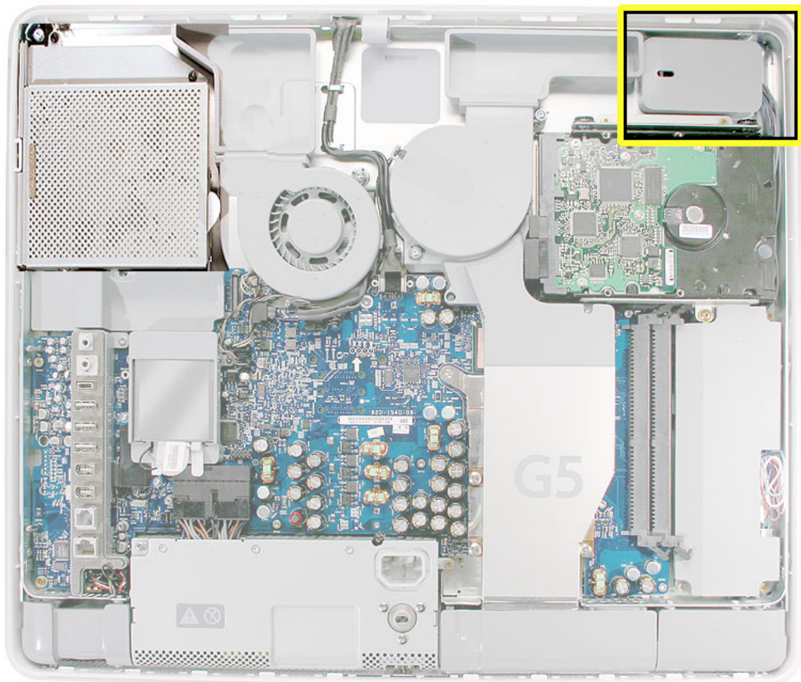
10. Lift the inverter out of the computer. Gently pull the black cable (circled) that is connected **under** (see next photo) the gray fan duct.



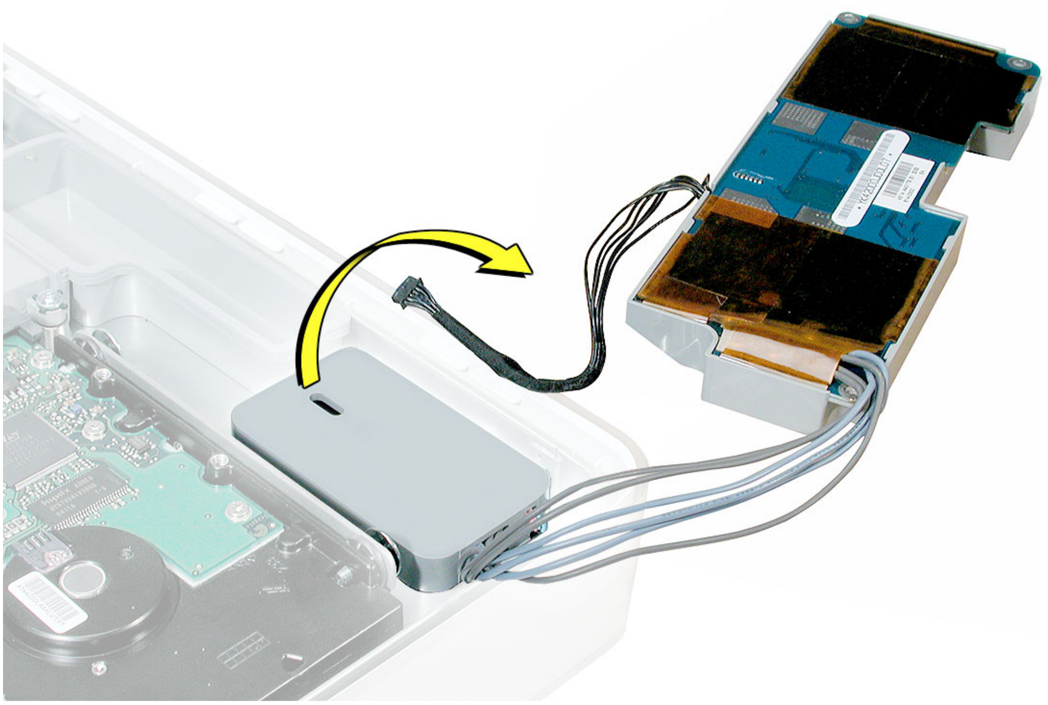
11. This picture shows a close up of the connector from step 10. The black cable (from the previous step) connects to the pins shown below.



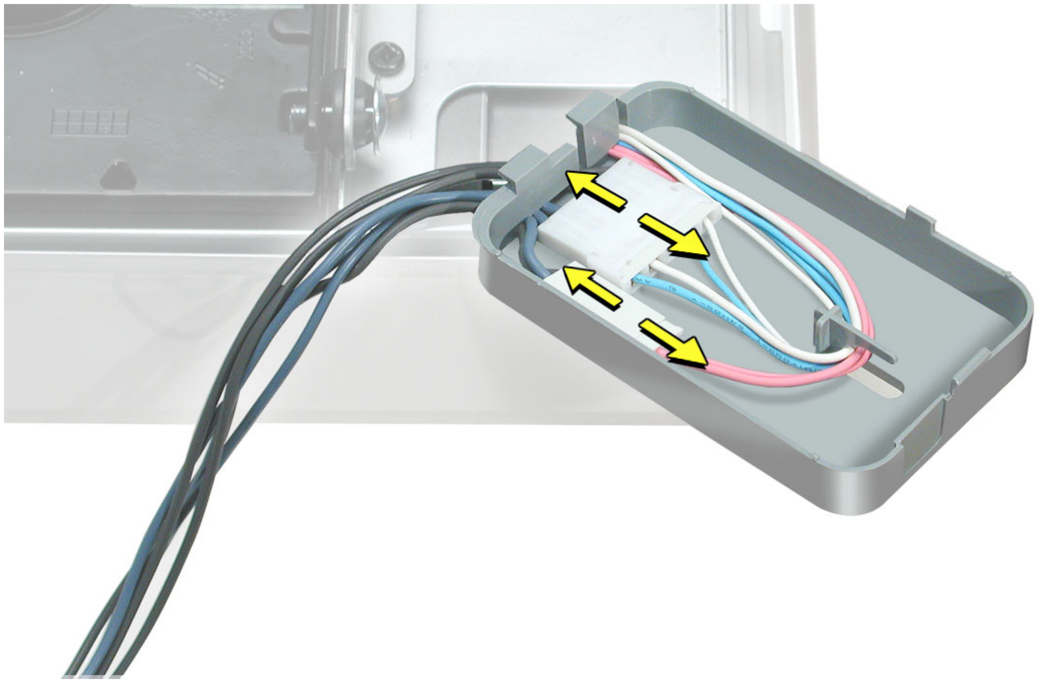
12. Locate the small, gray inverter cable cover in the top right corner.



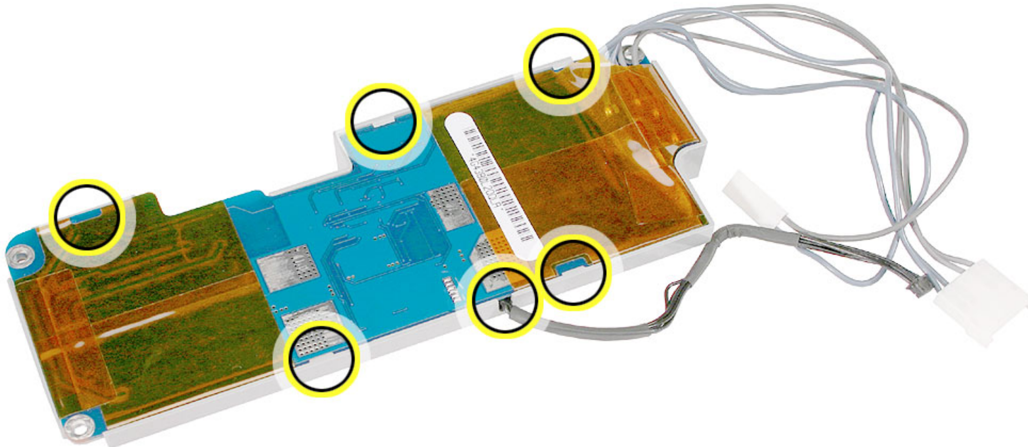
13. Pull the gray cover in the direction of the arrow.



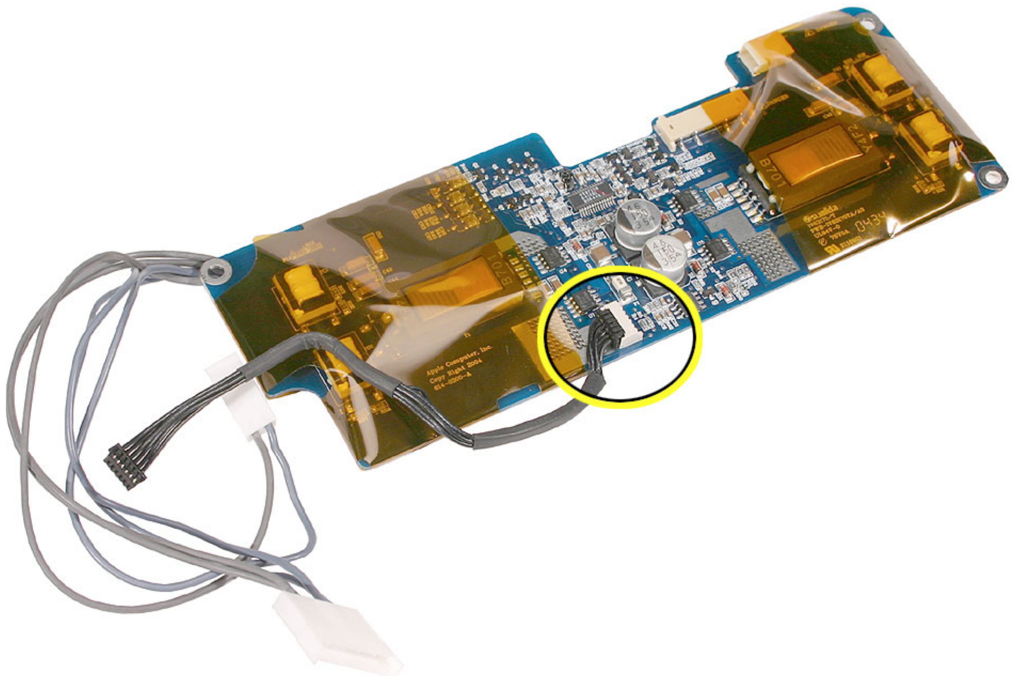
14. Disconnect the two white connectors underneath the cover. Pull on the connectors, not on the cables. Free the cables from the clips inside the cover. Set the inverter and cover aside.



15. Turn over the inverter as shown. Using your fingers or a flatblade screwdriver, remove the gray plastic inverter cover by prying the tabs (circled below) away from the board. Set the cover aside.

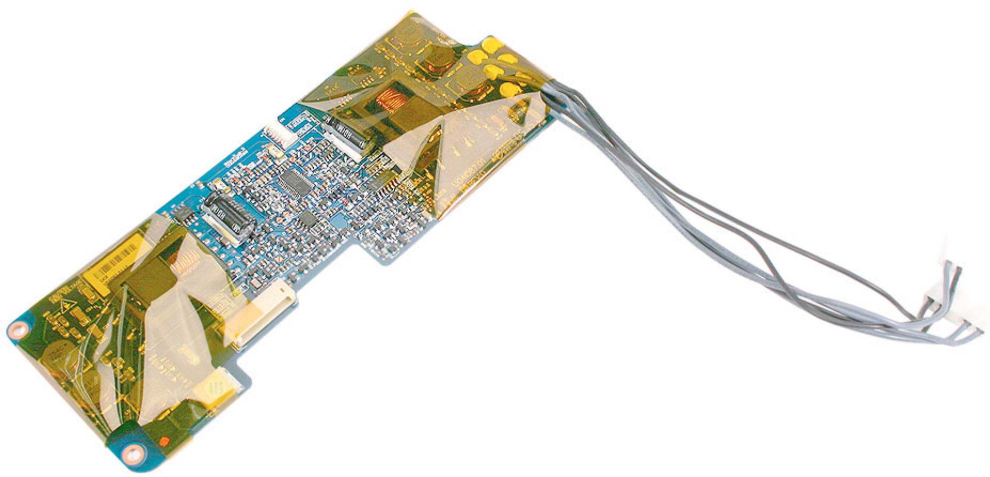


16. Turn the inverter board over. Disconnect the black cable and transfer it to the replacement inverter.



Installing the Replacement Inverter

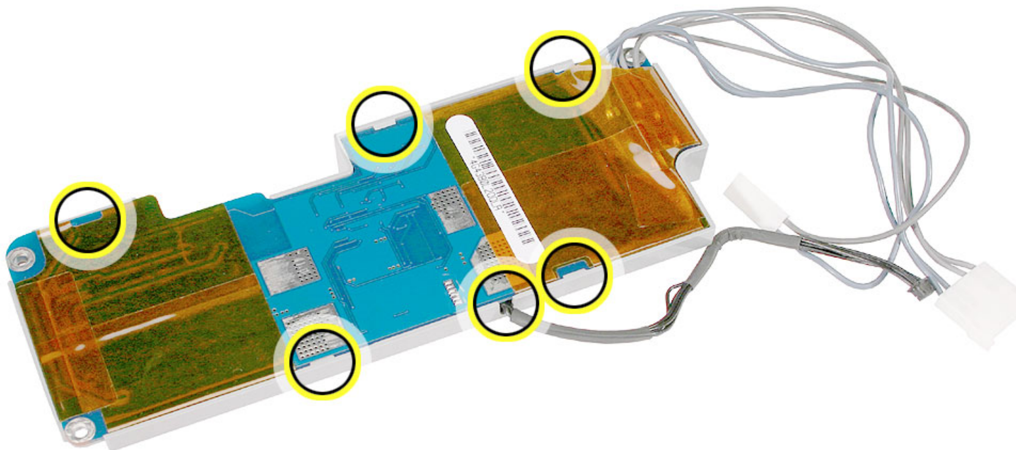
1. Remove the replacement inverter from its packaging. Attach the black inverter cable that you removed in the previous step.



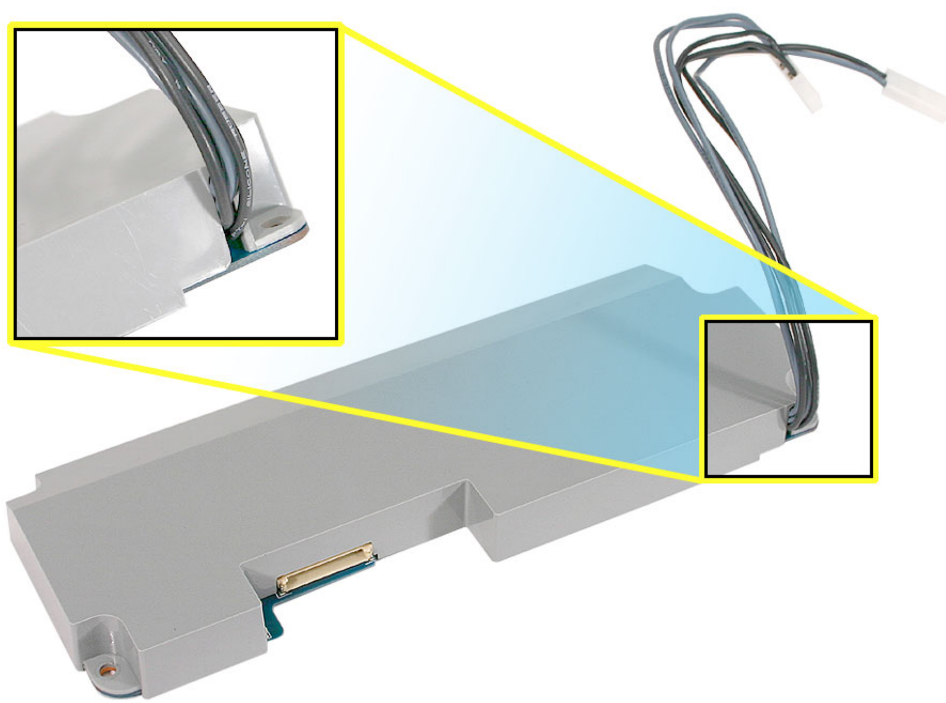
2. Locate the gray plastic cover that came with the inverter.



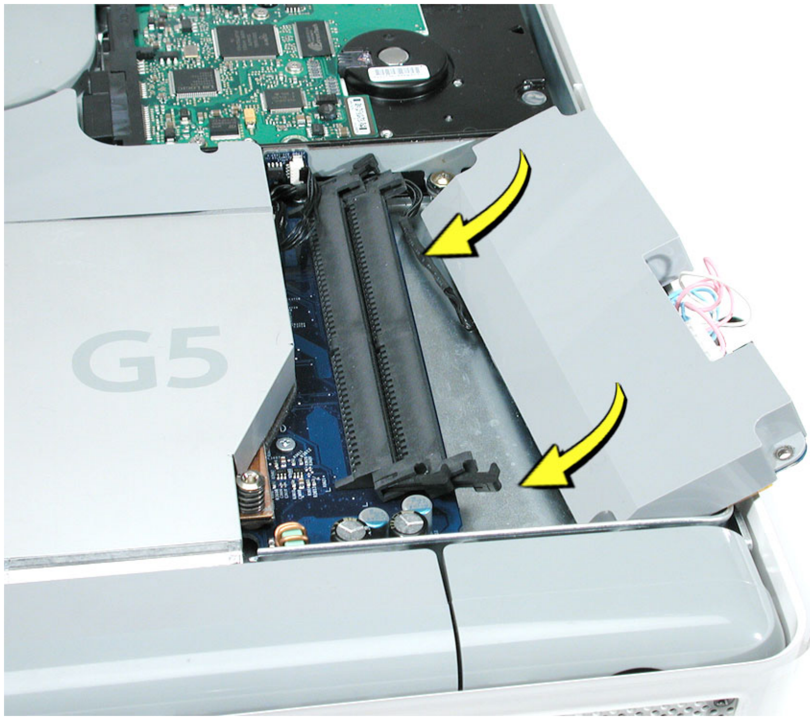
3. Install the plastic cover on the replacement inverter board. Gently squeeze the board near each tab (circled) until all six tabs snap onto the board.



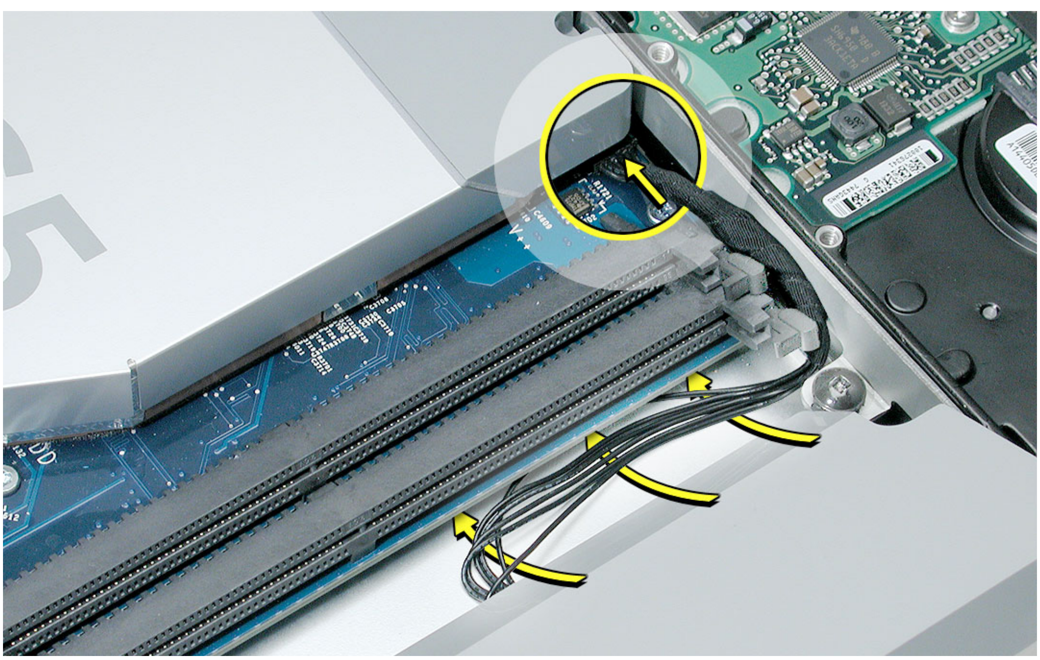
4. Turn over the inverter. Pull the inverter cables up into the slot on the inverter cover as shown.



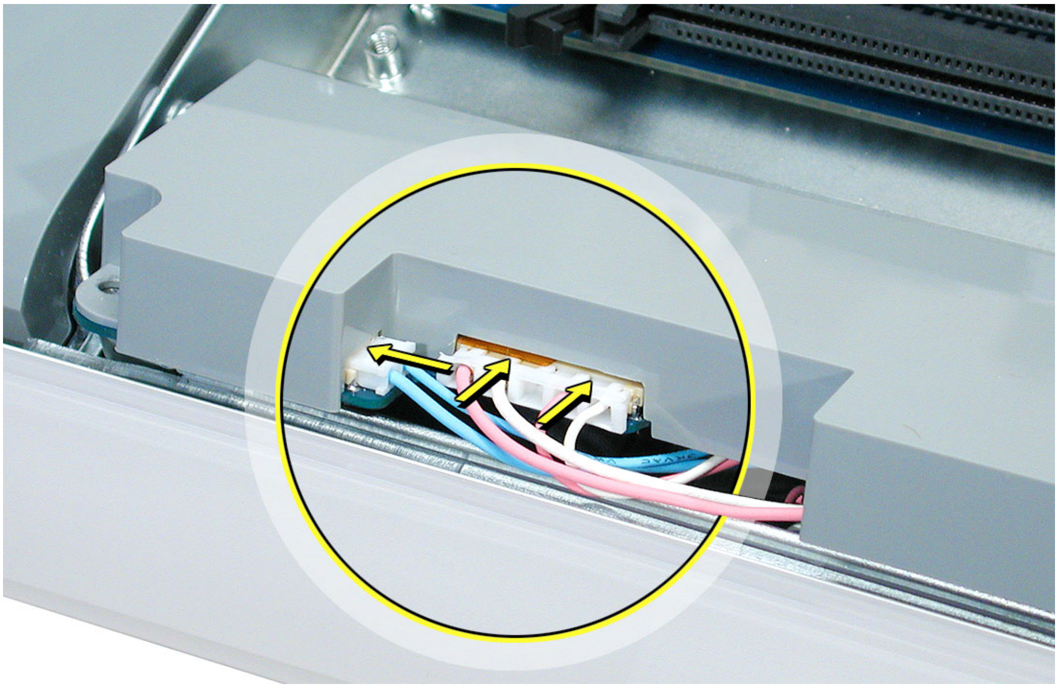
5. Slide the inverter partially into place. **Note:** The excess black cable tucks under the memory slots. **Important:** Be careful of the DIMM latches when you install the inverter board, they are very delicate. Push the DIMM latches into the closed position before installing the inverter board.



6. Route the black inverter cable along the side of the hard drive. With a needlenose pliers, or other small tool, push the inverter cable (the teeth on the connector face up) into the connector.

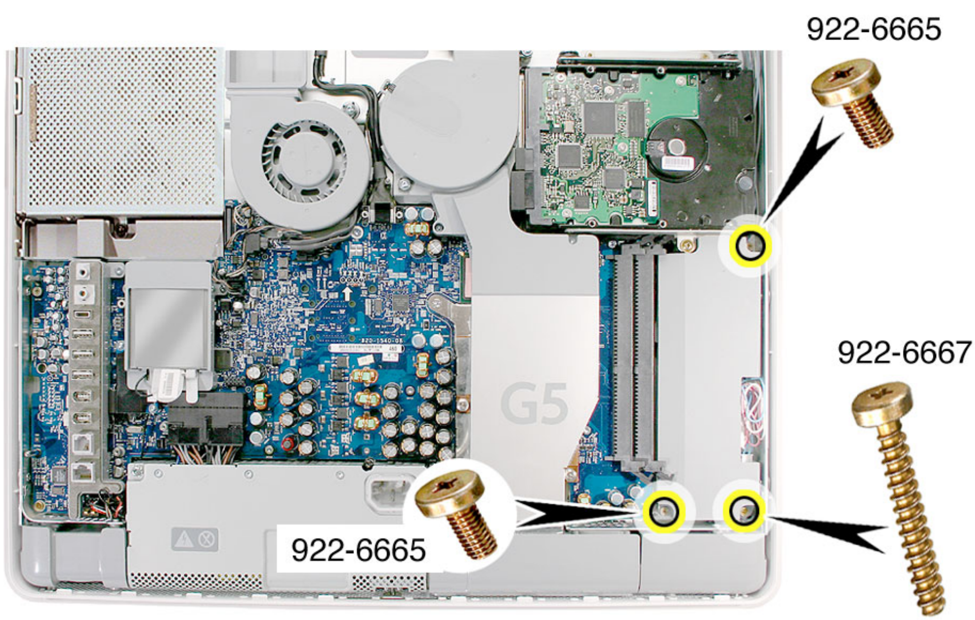


7. Connect the inverter cables, connecting the small connector first. **Note:** The connectors are keyed, and plug in only one way.

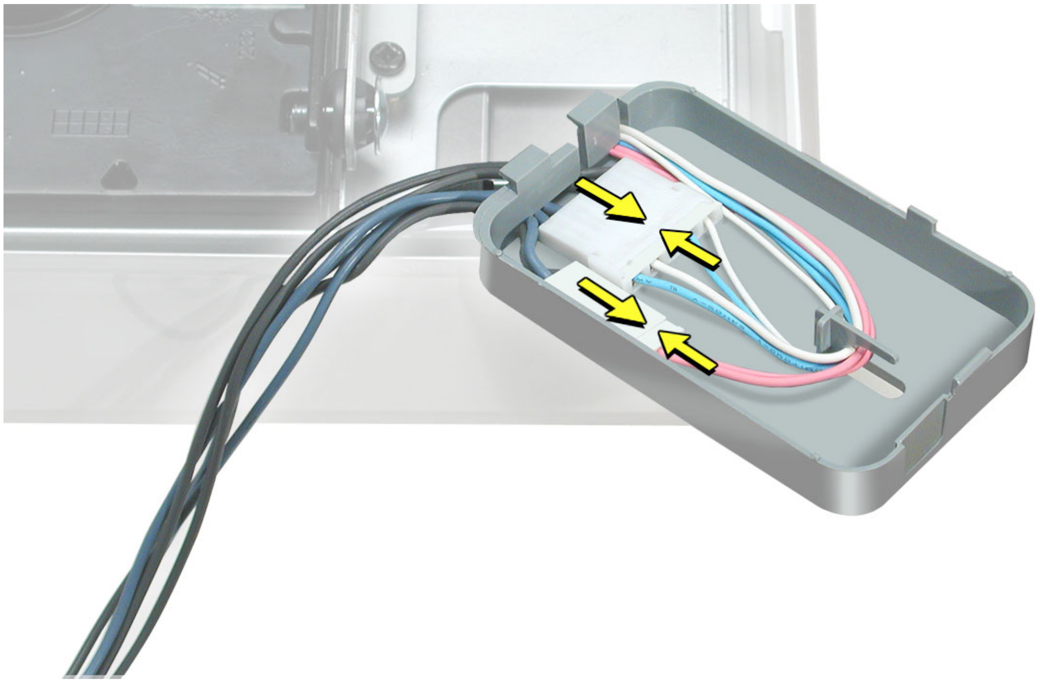


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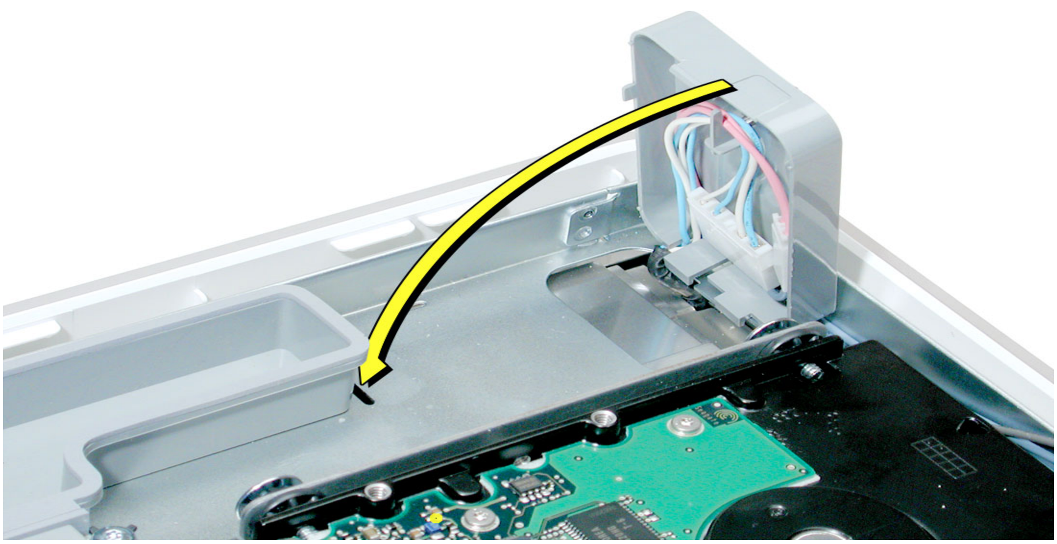
8. Lower the inverter into place. Replace the three inverter screws.



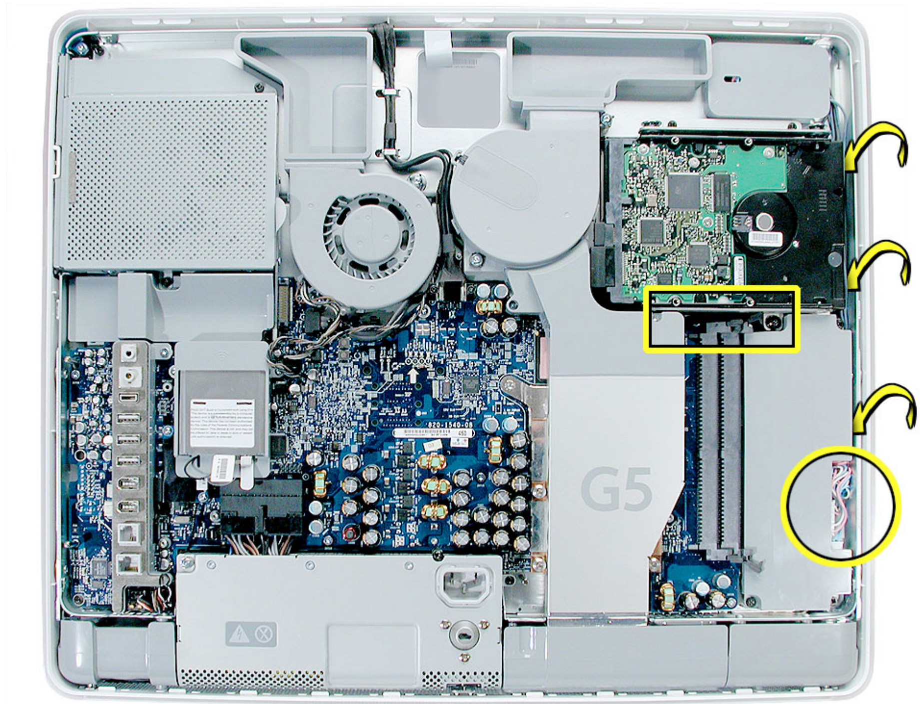
9. Locate the gray inverter cable cover. Connect the inverter cables as shown, making sure the connectors lie flat inside the cable cover.



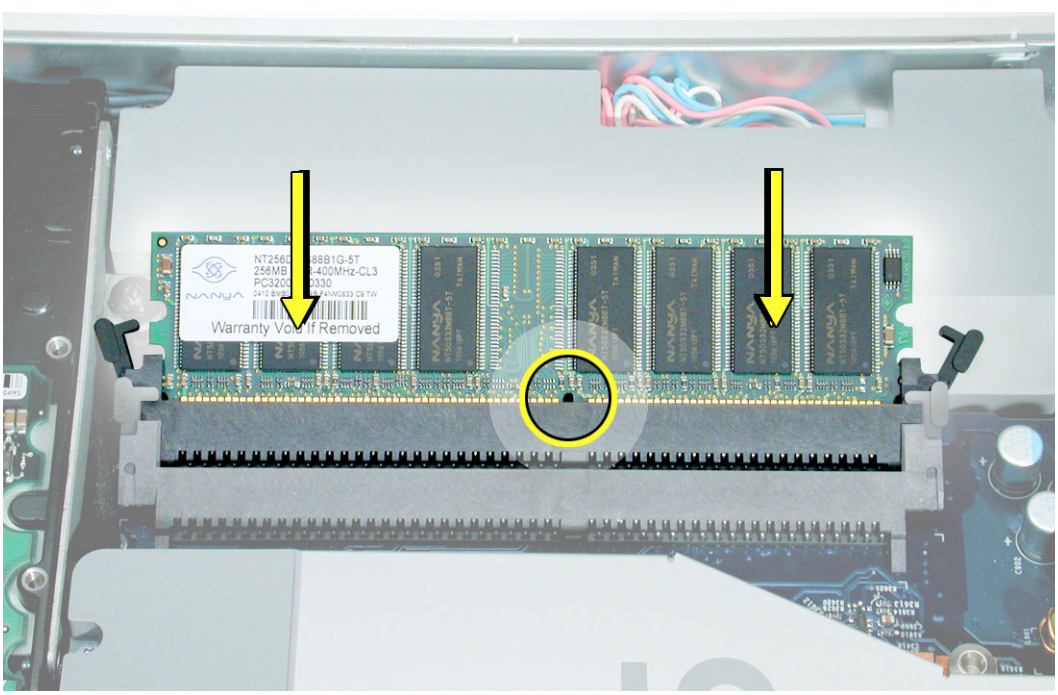
10. Lower the cable cover, pressing down steadily until the tabs on the cover lock the cover into the midplane.



11. Tuck the inverter cables along the edge of the hard drive and next to the memory tabs.

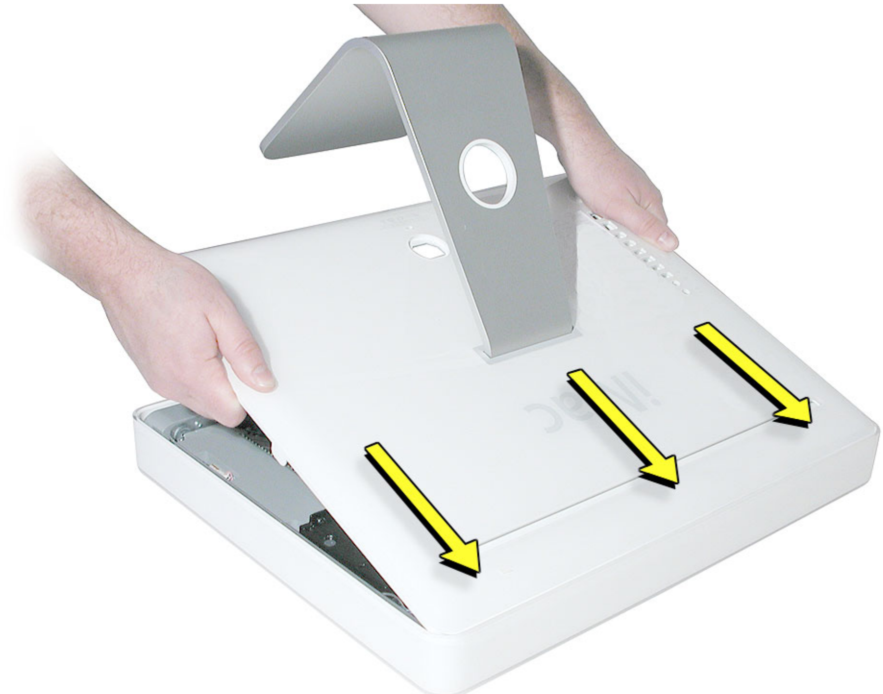


12. Replace the memory module(s) by lining up the notch on the module with the notch on the slot. Press firmly on the memory module until it clicks into place. Use your thumb and index finger to push the module into the slot.



Closing the Computer

1. Replace the cover so that the slots on the top edge of the cover mate with the tabs on the display housing.



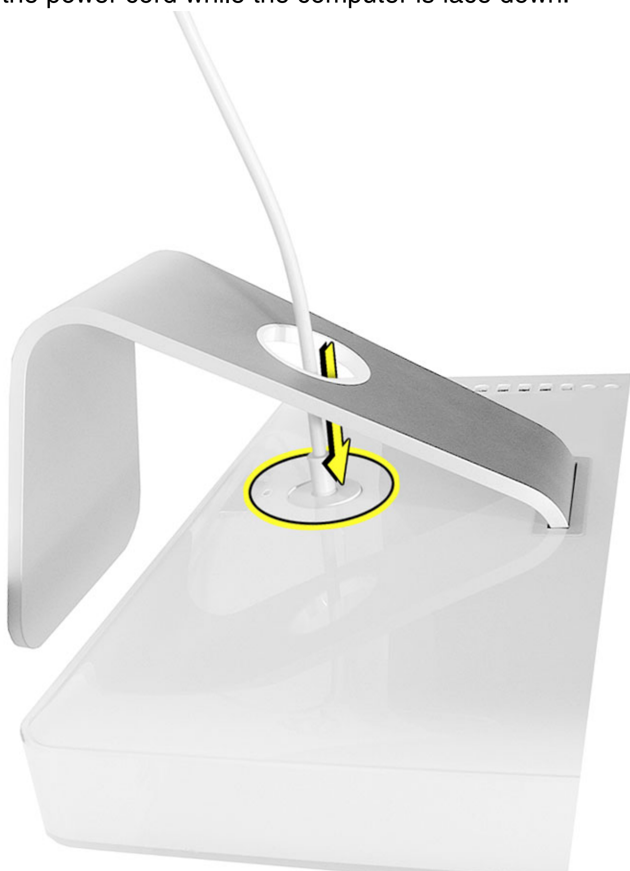
2. Lower and press the cover into place until it fits snugly on the computer.



3. Tighten the case screws by turning them to the right.



4. Reconnect the power cord while the computer is face down.



5. Position the computer in the upright position. Power on the computer.



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